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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/621,476	07/21/2000	Raynold M. Kahn	PD-200043	3684

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THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
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EXAMINER

NGUYEN, MINH DIEU T

ART UNIT PAPER NUMBER

2137

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No. 09/621,476	Applicant(s) KAHN ET AL.	
	Examin r Minh Dieu Nguyen	Art Unit 2137	

-- Th MAILING DATE of this communication appears on the cov r sh et with th correspond nce address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, and 16-35 is/are rejected.
- 7) ☒ Claim(s) 12-15, 36 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment dated August 24, 2004 has been entered with the amendment of claims 1-2, 6, 8 and 32.

Claims 1-37 are pending.

Information Disclosure Statement

2. The information disclosure statement filed October 14, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The non-patent literature documents listed on page 4 are missing.

Response to Arguments

3. Applicant's arguments filed August 24, 2004 have been fully considered but they are not persuasive.

4. Applicant's arguments with respect to claims 1-4, 6, 12-14, 16, 19-20, 22, 25-28, and 36 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments focus on the combination of features introduced by the amendment with elements that already existed in the claims. The new material is

rendered obvious by Maillard et al. (6,466,671) in view of Saito (EP 1122910 A1) and further in view of Lee et al. (5,790,783).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-11 and 16-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maillard et al. (6,466,671) in view of Saito (EP 1122910 A1) and further in view of Lee et al. (5,790,783).

a) **As to claims 1-2, 16 and 23-26**, Maillard discloses a method and apparatus relating a digital television broadcast and reception system comprising the steps of receiving a data stream comprising the program material encrypted according to a first encryption key and control data (col. 7, lines 5-15), the control data comprising the first encryption key and being encrypted (col. 7, lines 33-41).

However, Maillard does not disclose the step of further encrypting the encrypted program material according to a second encryption key and storing the information in the storage device.

Saito discloses method and device for protecting digital data by double re-encryption comprising double encrypting the digital video program (Fig. 8, elements 20 and 16) and storing the encrypted program material and control data and the fourth encryption key in the storage device (Fig. 8, element 81).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of double encrypting the program material and storing the information to a storage medium, as Saito teaches, in the system of Maillard so as to better protect the program material.

The combination of Maillard and Saito does not disclose encrypting the second encryption key according to a third encryption key to produce a fourth encryption key.

Lee discloses a method and apparatus for providing, maintaining and upgrading the software lock of a microprocessor wherein the microprocessor serial number is encrypted using a double-key encryption scheme and Lee further discloses an encryption key is itself encoded (col. 2, lines 12-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of encrypting the encryption key as Lee teaches in the system of Maillard and Saito so as to provide easy access to an authorized user, while preventing unauthorized reading of the data (col. 2, lines 13-15).

b) **As to claims 3, 19-20 and 27,** Maillard discloses the method further comprising the steps of accepting a PPV request before decrypting the encrypting

program material using the first encryption key (col. 3, lines 57-67) and recording billing information regarding the program material (col. 14, lines 8-11).

c) **As to claims 4 and 28**, Maillard discloses the method further comprising the steps of further encrypting the control data according to the second encryption key, storing the further encrypted control data and decrypting the further encrypted control data according to the second encryption key (Fig. 2).

d) **As to claims 5 and 29**, Maillard discloses the method further comprising the step of providing the program material to a presentation device (Fig. 2, element 2022).

e) **As to claims 6-7, 21 and 30-31**, the combination of system of Maillard, Saito and Lee, as addressed in claim 1 indicates the second key used in double encrypting the program material and third key used in encrypting the second key must be unique to the receiver to provide the security against the discovery and unauthorized use of key and program material.

f) **As to claims 8-10 and 32-34**, Maillard discloses the method wherein the further encrypted program material, the control data and the third encryption key are stored on a disk drive device wherein the disk drive device is a hard disk drive or an optical disk drive (Fig. 4, element 3056).

g) **As to claims 11 and 35**, Maillard discloses the method wherein the data stream further comprising metadata describing program material replay rights (Fig. 2, elements 3014, 3008).

h) **As to claims 17-18**, Maillard discloses the apparatus further comprising a media storage device communicatively coupled to the first encryption module and the first decryption module, for storing and retrieving the further encrypted program material and the control data and the fourth encryption key (Fig. 4, element 3056).

i) **As to claim 22**, the examiner takes official notice that use of single chip for performing encryption/decryption operations is quite well known in the data encryption art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of single chip for performing encryption/decryption operations in the system of Maillard, Saito and Lee so as to make the reverse engineering much harder to do.

Allowable Subject Matter

7. Claims 12-15 and 36-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2137

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Minh Dieu Nguyen
Examiner
Art Unit 2137

mdn
mdn
1/24/05



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER